

19. The V-belt transmission according to claim 8, further comprising:

*Al
cont*
a short sleeve;

a ramp plate; and

a long sleeve, wherein the short sleeve abuttingly engages the drive end of the crankshaft and the long sleeve and the short sleeve sandwich the ramp plate therebetween.

REMARKS

Applicants appreciate the Examiner's thorough consideration provided the present application. Claims 1-19 are currently pending in the instant application. Claim 8 has been amended. Claims 1 and 8 are independent. A complete listing of the pending claims has been provided hereinabove for the Examiner's convenience. Reconsideration of the present application is earnestly solicited.

Claim Rejections Under 35 U.S.C. § 112

Claim 4 stands rejected under 35 U.S.C. § 112, second paragraph as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In light of the foregoing amendments to the claims, Applicants submit that this rejection has been obviated and/or rendered moot.

Claim Rejections Under 35 U.S.C. § 103

Claims 1-5, 7-17 and 19 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Ishihara (U.S. Patent No. 4,567,958) in view of Izumi (U.S. Patent No. 6,155,371). Claims 6 and 8 have been rejected under 35 U.S.C. § 103(a) over informal Official Notice. This rejection is respectfully traversed.

Applicants submit that the Examiner's alleged combination fails to teach each and every element of the claimed invention. In addition, the Examiner has selectively extracted teachings from the prior art of record while ignoring the teachings of the references as a whole. Accordingly, Applicants submit that it would not have been obvious to modify the teachings of Ishihara in view of Izumi.

The Examiner admits that Ishihara "does not disclose said fixed pulley half being fixed to said transmission gears 140." With respect to claims 1 and 8, the Examiner is reminded that the fixed pulley half claimed by Applicants is connected to the driving pulley side (claim 8), e.g. to the end of the crankshaft (claim 1). In fact, Ishihara is directed toward the same type of arrangement that Applicants describe in the Background of the Invention. Specifically, Applicants have identified problems associated with the transmission system of Ishihara and have invented a unique combination of elements that overcomes these problems.

Further, the Examiner has not identified any teaching in the prior art of record that indicates that the arrangement of the nut and threaded shaft arrangement clearly shown in BOTH Ishihara and Izumi (Figure 5, element 224) on the end of the crankshaft suffers from any art recognized problem. Accordingly, absent Applicants' own teachings provided in their patent application, the Examiner would not have had any reason to attempt to modify Ishihara as alleged by the Examiner.

The Examiner allegedly relies upon the "teachings" of Izumi to modify Ishihara. The Examiner has worded the rejection to state that "Izumi teaches in figure 4, a fixed pulley half of a variable radius pulley half fixed to a shaft with a bolt." However, this statement carefully ignores that the "bolt" (element 240 of Izumi) is affixed to the driven side of the transmission, e.g. main shaft (element 186 of Izumi). In the claimed invention, the fixed pulley half is connected to the end of the crankshaft, e.g. the driving side of the transmission (e.g., please see element 224 on the crankshaft clearly shown in Figures 4 and 5).

In BOTH Izumi and Ishihara, the fixed pulley half on the driving side (connected to the crankshaft) is affixed thereto by a nut (element 224 in Figures 4 and 5). It is clearly apparent that Izumi does NOT teach that the fixed pulley half on the driving side of a transmission should be affixed by a bolt as in the claimed invention. In fact, Izumi is directed toward an

arrangement that is merely evidence of the stated problem that Applicants have attempted to solve.

The Examiner improperly alleges that Izumi teaches or suggests "it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the apparatus of Ishihara in view of the teachings of Izumi to *fix the fixed pulley half to the crankshaft by a bolt engaged in a bolt hole within the crankshaft to provide a greater thread engagement without increasing the overall length of the crankshaft.*" (emphasis added) Applicants submit that this teaching does NOT appear anywhere within the Izumi or Ishihara reference. In fact, Izumi teaches the exact opposite of that alleged by the Examiner. Izumi fixes the fixed pulley half to *the crankshaft by a nut engaged with threaded shaft.*

The Examiner is clearly conducting a piecemeal extraction of only those aspects of the Izumi reference pertinent to the rejection while completely ignoring the entirety of the teachings that actually teach against the alleged combination. Lines 2-3 of page 3 of the Examiner's Office Action has been deliberately worded to only advance that portion of the Izumi reference that is favorable to the alleged obviousness combination of the Examiner. One of ordinary skill in the art would clearly appreciate that in the Examiner's rejection, a complete and accurate description of the threaded shaft and nut arrangement that is clearly shown in Figures 4 and 5 on the fixed pulley half

connected to the driving side (crankshaft) of the transmission has been omitted. This rejection is clearly improper.

If the Examiner persists in alleging that Izumi teaches the alleged motivation to modify Ishihara, Applicants would appreciate an explanation on the record how the Examiner feels that Izumi can deliberately show and describe a nut and threaded shaft arrangement in the same location where it allegedly teaches the opposite. Applicants fail to see how Izumi can be interpreted to teach that "it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the apparatus of Ishihara in view of the teachings of Izumi to *fix the fixed pulley half to the crankshaft by a bolt engaged in a bolt hole within the crankshaft to provide a greater thread engagement without increasing the overall length of the crankshaft.*"

In accordance with the above discussion of the patents relied upon by the Examiner, Applicants respectfully submit that these documents, either in combination together or standing alone, fail to teach or suggest the invention as is set forth by the claims of the instant application.

Accordingly, reconsideration and withdrawal of the claim rejection are respectfully requested. Moreover, the Applicants respectfully submit that the instant application is in a condition for allowance.

As to the dependent claims, Applicants respectfully submit that these claims are allowable due to their dependence upon an allowable independent claim, as well as for additional limitations provided by these claims.

Conclusion

Since the remaining patents cited by the Examiner have not been utilized to reject the claims, but rather to merely show the state-of-the-art, no further comments are necessary with respect thereto.

All the stated grounds of rejection have been properly traversed and/or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently pending rejections and that they be withdrawn.

It is believed that a full and complete response has been made to the Office Action, and that as such, the Examiner is respectfully requested to send the application to Issue.

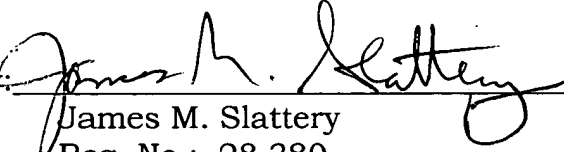
In the event there are any matters remaining in this application, the Examiner is invited to contact Mr. Matthew Shanley, Registration No. 47,074 at (703) 205-8000 in the Washington, D.C. area.


If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§1.16 or

1.17; particularly, extension of time fees.

Respectfully submitted,

BIRCH, STEWART, KOLASCH & BIRCH, LLP

By: 
James M. Slattery
Reg. No.: 28,380


JMS/MTS/clb

P. O. Box 747
Falls Church, VA 22040-0747
(703)205-8000

MARKED-UP VERSION OF AMENDMENTS

IN THE CLAIMS:

Please amend the claims as follows:

8. (Amended) A V-belt transmission comprising:

a crankshaft having a drive end;

a rear wheel drive section;

a driving pulley operatively connected to said crankshaft;

and a driven pulley operatively connected to [a] the rear wheel drive section of said transmission;

a V-belt arranged between said driving pulley and said driven pulley, wherein said driving pulley includes a fixed pulley half fixed to an end portion of the crankshaft and an axially movable pulley half supported on the crankshaft in a position laterally opposite to the fixed pulley half; and

a bolt securing said fixed pulley half to the end portion of the crankshaft, said bolt threadingly engaged with a bolt hole formed within an interior portion of the end portion of the crankshaft.